Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A device for cooling a fuel cell that adjusts a temperature of the fuel cell to a target set temperature by supplying a coolant, ~~wherein~~comprising:

~~a parameter related to a temperature of the coolant can be controlled so as to maintain an electric conductivity at the target set temperature within a target electric conductivity range based on the correlation between the parameter related to the coolant temperature and the electric conductivity of the coolant.~~

electric conductivity measuring means for measuring an electric conductivity of the coolant;

temperature means for measuring a temperature of the coolant; and

means for estimating the electric conductivity at the target set temperature based on the electric conductivity of the coolant, the temperature of the coolant, and a correlation between the temperature and the conductivity of the coolant, wherein

based on a correlation between a parameter related to the temperature of the coolant and the electric conductivity of the coolant, when the electric conductivity at the target set temperature exceeds a target electric conductivity range, the parameter related to the temperature of the coolant is controlled so as to maintain the electric conductivity at the target set temperature within the target electric conductivity range.

2. (Original) The device for cooling a fuel cell according to claim 1, wherein the parameter related to the temperature of the coolant is at least one element selected from the group including the temperature of the coolant, a cooling degree of the coolant, a required output of the fuel cell, an operation state of the fuel cell, and an external air temperature.

3. (Previously Presented) The device for cooling a fuel cell according to claim 1, wherein the temperature of the coolant is controlled by changing at least one of the cooling degree of the coolant and the operation state of the fuel cell.

4. (Previously Presented) The device for cooling a fuel cell according to claim 1, further comprising electric conductivity decreasing means for decreasing the electric conductivity of the coolant, wherein

the parameter related to the temperature of the coolant is controlled based on the decrease quantity of the electric conductivity with the electric conductivity decreasing means.

5. (Currently Amended) The device for cooling a fuel cell according to claim 1, further comprising:

~~electric conductivity measuring means for measuring the electric conductivity of the coolant;~~

~~temperature measuring means for measuring the temperature of the coolant;~~

~~means for estimating the electric conductivity at the target set temperature based on the electric conductivity of the coolant, the temperature of the coolant, and the correlation of the temperature and electric conductivity of the coolant; and~~

means for decreasing the target set temperature when the electric conductivity at the target set temperature exceeds the target electric conductivity range.

6. (Original) The device for cooling a fuel cell according to claim 5, further comprising means for increasing the target set temperature within a range in which the electric conductivity at the target set temperature does not exceed the target electric conductivity range.

7. (Currently Amended) A method for cooling a fuel cell by which a temperature

of the fuel cell is adjusted to a target set temperature by supplying a coolant, the method comprising the steps of:

measuring a electric conductivity of the coolant;

measuring a temperature of the coolant;

estimating the electric conductivity at the target set temperature based on the electric conductivity of the coolant, the temperature of the coolant, and a correlation of the temperature and electric conductivity of the coolant; ~~and~~

controlling a parameter related to the temperature of the coolant and the electric conductivity of the coolant when the electric conductivity at the target set temperature exceeds a target electric conductivity range, so as to maintain the electric conductivity at the target set temperature within the target electric conductivity range; and

decreasing the target set temperature when the electric conductivity at the target set temperature exceeds the target electric conductivity range.

8. (Original) The method for cooling a fuel cell according to claim 7, further comprising a step of increasing the target set temperature within a range in which the electric conductivity at the target set temperature does not exceed the target electric conductivity range.

9. (Previously Presented) The device for cooling a fuel cell according to claim 2, wherein the temperature of the coolant is controlled by changing at least one of the cooling degree of the coolant and the operation state of the fuel cell.

10. (Previously Presented) The device for cooling a fuel cell according to claim 2, further comprising electric conductivity decreasing means for decreasing the electric conductivity of the coolant, wherein

the parameter related to the temperature of the coolant is controlled based on the decrease quantity of the electric conductivity with the electric conductivity decreasing

means.

11. (Previously Presented) The device for cooling a fuel cell according to claim 3, further comprising electric conductivity decreasing means for decreasing the electric conductivity of the coolant, wherein

the parameter related to the temperature of the coolant is controlled based on the decrease quantity of the electric conductivity with the electric conductivity decreasing means.

12. (Previously Presented) The device for cooling a fuel cell according to claim 9, further comprising electric conductivity decreasing means for decreasing the electric conductivity of the coolant, wherein

the parameter related to the temperature of the coolant is controlled based on the decrease quantity of the electric conductivity with the electric conductivity decreasing means.